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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,555	10/27/2003	Timothy J. Mousley	PHB 34-313A	2430

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

APPIAH, CHARLES NANA

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/694,555	Applicant(s) MOULSLEY ET AL.	
	Examiner Charles N. Appiah	Art Unit 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,668,168. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broad enough to be encompassed by limitations of the corresponding claims of the patent and as such it would have been obvious to one of ordinary skill in the art to implement the invention of the instant application using the claims of the patent for the benefit of controlling overhead signaling.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 6-11, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by **Rezaiifar et al. (6,377,809)**.

Regarding claims 1, 6, 9 and 12 Rezaiifar discloses (see Figs. 2-3), a radio communication system, a primary station (4), secondary station (6) and a method of operating a radio communication system comprising: a primary station and a plurality of secondary stations, the system having a communication channel between the primary station and a secondary station (50, 52, Fig. 2), the channel comprising an uplink control channel (pilot/control channel within reverse link physical channels), and a downlink control channel (control channel within forward link physical channels, Fig. 3), and a data channel (data channels within forward and reverse link physical channels, see col. 3, lines 1-11), for the transmission of data packets characterized in that the primary and secondary stations have traffic reduction means for reducing traffic in the uplink and downlink control channels (placing of remote station in a suspended state

when the traffic channel is released, see col. 3, lines 55-64, col. 16, lines 6-14), and control means for activating the traffic reduction means (control channel only being used when the remote station is in a traffic state, col. 19, lines 41-50).

Regarding claims 2, 7, 10 and 13 Rezaiifar further discloses that the control means activates the traffic reduction means after a predetermined period has passed without transmission of a data packet on the data channel (period of inactivity since the termination of the last transmission exceeds a first predetermined threshold, remote station being placed in a suspended state, traffic channel is released but the but the state information is retained by both the remote station and the base station, see col. 3, lines 52-64).

Regarding claims 3 and 11, Rezaiifar further discloses that the traffic reduction means comprises means for transmitting a reduced amount of control information compared to that transmitted during transmission of data packets (transitions of remote station from the suspended or dormant mode to traffic channel mode being initiated by either a base station or remote station with the remote station and the base station traversing through the call set up process (see col. 17, lines 9-29).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 8 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over **Rezaiifar et al.**

Regarding claims 4, 8 and 14 Rezaiifar meet all limitations as applied above to claims 1, 6 and 12. Rezaiifar further teaches that in order to expedite the scheduling process for the forward and reverse links, the control frames are each a quarter of the traffic channel frame, or 5 msec for 20msec traffic channel frames (see col.9, lines 17-33), suggesting the transmission of control channels in specific slots of the available time slots. Rezaiifar, however, fails to explicitly teach wherein the traffic reduction means operates to transmit control information in one out of every N available slots where N is an integer greater than 1. However, since Rezaiifar discloses a control frame being a fraction of a traffic channel frame, those of ordinary skill in the art would have appreciated being able to transmit control information or data in any number of slots including one out of the available time slots in order to reduce the amount of control information transmitted during the period of reduced data activity compared to normal data transmissions in order to conserve communication resources.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Rezaiifar et al** as applied to claim 1 above, and further in view of **Gray et al. (6,473,419)**.

Regarding claim 5, Rezaiifar fails to explicitly disclose that the traffic reduction means comprises means for interrupting transmission of the uplink and downlink control channels.

In an analogous field of endeavor, Gray discloses a system for controlling packet data communications in which operation of data service is transitioned into a

control hold state after a period of inactivity from a suspended state during which there is no exchanging of data for more than a time period T_{hold} (see Fig. 2, col. 6, lines 4-20 and col. 7, lines 12-40).

It would have been obvious to one of ordinary skill in the art to provide Gray's teaching of different communication states to Rezaiifar's system in order to ensure the allocation of dedicated channels on an as needed basis while ensuring quality of service.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakano et al. (5,933,782) discloses a power control scheme during a diversity period in a communication system.

Cerwall et al. (6,272,352) discloses a method for determining a number of control channels in a cell.

Hamalainen et al. (5,802,465) discloses a data transmission system that uses a maintained virtual channel when there is a termination of a packet data transfer.

Sasuta (5,313,655) discloses a method for reducing control channel activity.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Appiah whose telephone number is 571 272-7904. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571 272-7905. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CA



CHARLES APPIAH
PRIMARY EXAMINER